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The Trane Company
Patent Department - 12-1
3600 Pammel Creek Road
La Crosse, WI 54601

EXAMINER	
ROBINSON BOYCE, AKIBA K	
ART UNIT	PAPER NUMBER
3628	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/747,642	MORONEY ET AL.	
	Examiner	Art Unit	
	AKIBA K. ROBINSON BOYCE	3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 April 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Due to communications filed 4/28/10, the following is a final office action. Claim 1 has been amended. Claims 7 and 9-59 have been cancelled. Claims 1-6, and 8 are pending in this application. The previous rejection has been modified to reflect claim amendments. Claims 1-6 and 8 are rejected as follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 5, 6, 8 , are rejected under 35 U.S.C. 103(a) as being unpatentable over Thackston (US 2002/0072820), and further in view of Thackston (US 6,295,513), now referred to as Thackston '13, and further in view of Sanchez-Lazer et al (US 6,000,945).

As per claim 1, Thackston discloses a system and process method for facilitating efficient communication of specifications for parts and assemblies including:

developing, by a computer system, an electronic specification describing a product and a plurality of components thereof, ([0030], FIG. 1 is a flow chart illustrating a process for approving an electronic specification according to an embodiment of the invention, and [0043], A first software component may allow the specification information to be entered and associated with highlighted features. Such a software component may be used to create the specification panels as shown in the examples of FIGS. 2, 3 and 4);

inducing the plurality of companies to manufacture the plurality of components, wherein the step of inducing the plurality of companies to manufacture the plurality of components includes forwarding the electronic specification to a specific company that is one of the plurality of companies, ([0048], lines1-13, shows that part or assembly may undergo a number of different fabrication processes that may or may not be performed by the same fabrication vendor , that coordination of such activity is usually done by the primary fabricator, however, the contracting design company however, has the greatest interest in the success of any coordination activity and may specify in contractual arrangements how such activity is to be managed. and that specifications for one or more parts may be forwarded to each fabricator involved in a part, where examiner interprets the fabrication vendors/fabricators as the companies);

inducing the specific company to build the product or a component thereof in accordance with a plurality of requirements in the electronic specification, wherein the

component is one of the plurality of components, ([0048] shows that as each fabricator performs their activity associated with each part, the fabricator can measure the part to ensure that they have fully complied with specifications)

Thackston does not disclose the following limitations, however, Thackston '13 discloses:

the specific company building the product or the component thereof in accordance with the plurality of requirements in the electronic specification, (col. 28, lines 5-9, shows design team creates a preliminary design using baseline part design model management module);

testing the product or the component thereof, (col. 27, lines 8-13, In general, modules 1502-1532 represent software which is used by design team members during the design and development phase to evaluate a proposed design. Typically, the current baseline part design model (or parts thereof) is the input, and the output is some measure of performance or compliance with applicable specifications, and col. 28,lines 42-45, shows analysis and simulation is performed to evaluate the preliminary baseline part design model);

upon testing the product or component thereof, creating an operability test result, (col. 28, lines 46-62. working copy type design model);

appending, via the computer system, the operability test result to the electronic specification, thereby creating an appended operability test result: (col. 28, lines 46-62, shows working copy type design model may be stored by the NICECAD system, col. 29, lines 3-9, The prime contractor may then store the new preliminary baseline part design model, as in step 1628. In one embodiment, this new model may be stored in module 865 of FIG. 8 and a revision history in module 840 of FIG. 8 would be updated. Preliminary PDM documents may be updated as required for the new design, as in step 1630, and col. 6, lines 1-3 shows The stored part design model data may include links to associated specifications, standards and other design specific documents , thereby suggesting that the design models or any updated versions that have been revised are stored as part of the specification since they have a direct link to the specification).

inducing the specific company to determine if the product or the component thereof is completed, (col. 38, line 39-col. 39,line 11, analysis of producibility);

inducing the specific company to forward the electronic specification with the appended operability test result to another one of the plurality of companies, (col. 38, line 39-col. 39, line 11, shows the preparation of a first query as a result of the designer's preference inputs which may be run against the database to identify a first results list of qualified fabricators, and then for a full search (which may include the upload of a part design model, producibility analysis and a second query, among other

steps), producibility analysis second query processing module 2650 performs a producibility analysis of the uploaded, converted and attribute-assigned part design model in order to prepare the second query set for a second results list of qualified fabricators, thereby suggesting that whether or not the design is produced, this information influences a search for a second set of fabricators that can produce the design); and

assembling the plurality of components to produce the product, which incorporates the late customer change, (col. 15, lines 57-61, is shows that if a fabricator team analyzing producibility determines that certain design changes should be effected, a proposed revised baseline part design model may be stored in this module, col. 41, lines 10-12, shows fabrication effort by the fabricator).

It would have been obvious to combine Thackston and Thackston '13 to disclose the above limitations with the motivation of showing a system and process method for facilitating efficient communication of specifications for parts and assemblies for manufacture, where the manufacture of parts additionally includes the design, development, and fabricator selection for a final design fabrication.

Neither Thackston nor Thackston '13 disclose after the specific company building the product or component thereof testing the product or the component thereof, however, in the abstract of Sanchez-Lazer et al, it is shown that the test assembly process includes

creating tests in electronic form from already-existing test items and allowing access by a plurality of assembly personnel and reviewers via a network, thereby suggesting that the product has already been built if an already-existing test exists, where Sanchez-Lazer et al discloses testing products, however, also, the test is the product of the present invention, and therefore Sanchez-Lazer performs tests on tests.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose after the specific company building the product or component thereof testing the product or the component thereof with the motivation of creating a test from a product that has already been built.

Thackston fails to disclose after the specific company building the product or component thereof, revising the electronic specification to include a late customer change, however, Thackston '13 disclose the step of revising the updated version to include late customer changes, in col. 15, lines 57-61, is shows that if a fabricator team analyzing producibility determines that certain design changes should be effected, a proposed revised baseline part design model may be stored in this module. In addition, Sanchez-Lazer et al discloses that the test assembly process includes creating tests in electronic form from already-existing test items and allowing access by a plurality of assembly personnel and reviewers via a network, thereby suggesting that the product has already been built if an already-existing test exists, and making it obvious to make revisions of an updated version of a specification to include late customer changes after the specific company building the product or component. In Sanchez-Lazer et al, testing products is disclosed, where examiner interprets the test of Sanchez-Lazer et al

as the product of the present invention, and in other words, Sanchez-Lazer performs tests on tests.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose after the specific company building the product or component thereof, revising the electronic specification to include a late customer change with the motivation of making revisions to a product that has already been built.

As per claim 2, Thackston discloses:

wherein the forwarding step includes the step of providing a central server to centralize the forwarding step, (ab, shows central server).

As per claim 5, Thackston fails to disclose the following, however, Thackston '13 discloses:

step of saving at least one updated version of the electronic specification, (col. 28, lines 46-62, shows working copy type design model may be stored by the NICECAD system, col. 29, lines 3-9, The prime contractor may then store the new preliminary baseline part design model, as in step 1628. In one embodiment, this new model may be stored in module 865 of FIG. 8 and a revision history in module 840 of FIG. 8 would be updated. Preliminary PDM documents may be updated as required for the new design, as in step 1630, and col. 6, lines 1-3 shows The stored part design model data may include links to associated specifications, standards and other

design specific documents , thereby suggesting that the design models or any updated versions that have been revised are stored as part of the specification since they have a direct link to the specification).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to save at least an updated version of the electronic specification with the motivation of having the most recent specification to use for building the design.

As per claim 6 neither Thackston nor Thackston '13 disclose the following, however, Sanchez-Lazer et al discloses:

comparing the updated version of the electronic specification with an electronic specification having appended test results, (Col. 19, lines 41-43, comparing worksheet contents to saved constraint set containing test specifications).

It would have been obvious to disclose the above limitation with the motivation of ensuring the correct specification has been updated.

As per claim 8, neither Thackston nor Thackston '13 disclose the following, however, Sanchez-Lazer et al discloses: comparing the revised updated version of the electronic specification with an electronic specification having appended test results; wherein the comparing step includes the steps of determining and implementing late customer changes to the electronic specification in the product or components, Col. 20, lines 16-24, review of layout).

It would have been obvious to disclose the above limitation with the motivation of ensuring the correct specification has been revised.

4. Claims 3, 4, 10, 11, 13, *16-19, 20-22*, are rejected under 35 U.S.C. 103(a) as being unpatentable over Thackston (US 2002/0072820), and further in view of Thackston (US 6,295,513), now referred to as Thackston '13, and further in view of Marchak et al (US 6,138,104), and further in view of Hunt et al (US 5,042,668), and further in view of Cho et al (US 5,295,067).

As per claims 3, 4, 10, 17, 21, neither Thackston nor Thackston '13 specifically disclose the following, however, Marchak et al discloses:

developing by the computer system an installation sequence from the build and test instructions, (Col. 3, lines 49-61, Individual work deliverables are defined in terms of a sequence of life-cycle stages, where each stage defines the roles responsible for planning, doing, administering, and receiving the deliverable at that stage, and the specific fields and attachments that are visible, modifiable, and required at that stage.); and

building the product using the build and test instructions in the sequence laid out by the installation sequence, (Col. 18, lines 14-16, user indicates work is completed).

It would have been obvious to combine the teachings of Thackston, Thackston '13 and Marchak et al to disclose the above limitations with the motivation of incorporating billing into the design of a product.

Neither Thackston, Thackston '13, Marchak et al disclose the following, however, Hunt et al discloses col. 3, lines 56-61, Appropriate control circuitry, in response to an output **signal** from sensor 46, may then be utilized to cause periodic energization of the pneumatic supply lines coupled to nozzle assembly 36, when an insufficient number of chips 20 is detected by sensor 46 within separator box 42, and col. 6, lines 5-10, After a sufficient number of chips 20 have been positioned within test block track 92, one chip 20 will overlie sensor aperture 94. At this point, a reflective sensor 96 may be utilized to generate a **signal** indicating the presence of a chip 20 at the predetermined testing position, claim 8 of Hunt shows said predetermined testing position includes an aperture therein and wherein said chip detection means comprises a reflective sensor disposed adjacent to said aperture for generating a presence **signal** in response to the presence of a uniformly oriented surface mount passive electronic component at said aperture. Claim 9 of Hunt also shows that a plurality of conductive probes and means for urging said plurality of conductive probes into temporary contact with said uniformly oriented surface mount passive electronic component in response to said presence signal, thereby making the following obvious:

calling for an input or output component to be operably connected to the communication bus as identified by the installation sequence,

verifying the operability of the components and the bus

receiving the first signal from the component by means of the bus

determining a unique identify for the signaling component

responding, by means of the bus, with a second signal to the component

providing the component with an identity.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose the above limitations with the motivation of showing that signals can be involved in the building and testing of components.

Neither Thackston, Thackston '13, Marchak et al, nor Hunt et al disclose the following:

However, Cho et al discloses:

providing a bill of materials for the components and the product at the time the electronic specification is developed/creating a bill of materials and a specification/periodically comparing the bill of materials to the electronic specification to verify the accuracy of both/ wherein the installation developing sequence includes a further step of cross checking the bill of materials with the installation sequence/ by a computer system, generating a sales order representative of a product/ developing by the computer system build and test instructions from the sales order (Claim 6, determining a required bill of materials list for said order configuration by evaluating said

order configuration according to said encoded relationships, where the first knowledge base for creation of the order configuration includes the specification). Cho et al discloses this limitation in an analogous art for the purpose of showing that the bill of materials is evaluated according to the specification.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a bill of materials for the components and the product at the time the electronic specification is developed/creating a bill of materials and a specification/periodically comparing the bill of materials to the electronic specification to verify the accuracy of both/ wherein the installation developing sequence includes a further step of cross checking the bill of materials with the installation sequence with the motivation of allowing a bill of materials to be created according to the specification.

As per claim 11, Thackston fails to disclose the following, however, Thackston '13 discloses:

wherein the developing and building steps are performed under the control of a control device, (abstract, central controller).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to build and test under the control of a control device with the motivation of having means to control the process.

As per claim 13, Thackston fails to disclose the following, however, Thackston '13 discloses:

wherein the developing an installation sequence step is accomplished by a tester device which also oversees the building step, (col. 27, lines 8-13, In general, modules 1502-1532 represent software which is used by design team members during the design and development phase to evaluate a proposed design. Typically, the current baseline part design model (or parts thereof) is the input, and the output is some measure of performance or compliance with applicable specifications, and col. 28,lines 42-45, shows analysis and simulation is performed to evaluate the preliminary baseline part design model*).*

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to develop an installation sequence step is accomplished by a tester device which also oversees the building step with the motivation of allowing means for properly testing the design.

As per claim 16, Thackston, Thackston '13 and Marchak et al fail to disclose:

wherein the responding step further includes the step of providing the signaling component with operational parameters, however, Hunt et al discloses this limitation in (col. 6, lines 5-14, signals used to indicate presence). Hunt et al discloses this limitation in an analogous art for the purpose of showing that signals are used to indicate the presence of a component.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose all above limitations with the motivation of using bus signals to control the operation of building components.

As per claim 18, Thackston fails to disclose the following, however, Thackston '13 discloses:

Wherein the developing the build and test instruction step includes the further step of using the specification to create a build and test file, (col. 28, lines 46-62, shows working copy type design model may be stored by the NICECAD system, col. 29, lines 3-9, The prime contractor may then store the new preliminary baseline part design model, as in step 1628. In one embodiment, this new model may be stored in module 865 of FIG. 8 and a revision history in module 840 of FIG. 8 would be updated. Preliminary PDM documents may be updated as required for the new design, as in step 1630, and col. 6, lines 1-3 shows The stored part design model data may include links to associated specifications, standards and other design specific documents).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to use the specification to create a build and test file with the motivation of allowing means for properly testing the design.

As per claim 19, Thackston fails to disclose the following, however, Thackston '13 discloses:

wherein the build and test file is in the xml format, (col. 10,line 9, xml)

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention for the build and test file is in the xml format with the motivation of allowing means for properly testing the design in an xml format.

As per claim 20/22, Thackston fails to disclose the following, however, Thackston '13 discloses:

Wherein the installation sequence developing step includes the further step of cross checking the installation sequence with the specification/wherein the verifying step includes the further steps of testing the operation of the communications bus, testing the operation of the component, and cross checking the identity, parameters and the operation of the component and the bus with the specification, (col. 38, line 39-col. 39,line 11, analysis of producibility).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to disclose the above limitations with the motivation of allowing means for properly testing the design.

Response to Arguments

5. Applicant's arguments filed 3/24/10 have been fully considered but they are not persuasive. As per claims 10, 11, 13, 16-22, applicant's amendments do not overcome 101 rejection. The steps processed by the computer in these claims are seen as data gathering (insignificant extrasolution in the Bilski analysis), and the claim is still considered non-statutory.

6. Applicant's arguments filed 4/28/10 have been fully considered but they are not persuasive.

As discussed in applicant's arguments, in a telephone interview on April 28, 2010, the applicants discussed with the Examiner the merits of claims 1 and 7 as they relate to the cited art. The applicants pointed out that the cited art fails to disclose the "testing-related" elements recited in claim 1 and fails to disclose the limitation of claim 7. The applicants proposed incorporating the limitations of claim 7 into claim 1. However, upon re-evaluation of the references used, and upon further discussion with her supervisor, examiner has decided to maintain prior art already used. The subject matter in claim 7 is clearly disclosed by the combination of references. It is true that Thackston fails to disclose after the specific company building the product or component thereof, revising the electronic specification to include a late customer change, however, Thackston '13 disclose the step of revising the updated version to include late customer changes, in col. 15, lines 57-61, is shows that if a fabricator team analyzing producibility determines that certain design changes should be effected, a proposed revised baseline part design model may be stored in this module. In addition, Sanchez-Lazer et al discloses that the test assembly process includes creating tests in electronic form from already-existing test items and allowing access by a plurality of assembly personnel and reviewers via a network, thereby suggesting that the product has already been built if an already-existing test exists, and making it obvious to make revisions of an updated version of a specification to include late customer changes after the specific company

building the product or component. In Sanchez-Lazer et al, testing products is disclosed, where examiner interprets the test of Sanchez-Lazer et al as the product of the present invention, and in other words, Sanchez-Lazer performs tests on tests.

In addition, applicant generally argues that the combination of references does not disclose the limitations of claim 1, however, as discussed in the previous response to arguments filed 4/6/10, the following applies:

As per claim 1, applicant argues that prior art fails to disclose "inducing the specific Company to forward the electronic specification with the appended operability test result to another one of the plurality of companies." However, as shown in [0048], lines1-13 of Thackston (US 2002/0072820), it is shown that part or assembly may undergo a number of different fabrication processes that may or may not be performed by the same fabrication vendor , that coordination of such activity is usually done by the primary fabricator, however, the contracting design company however, has the greatest interest in the success of any coordination activity and may specify in contractual arrangements how such activity is to be managed, and that specifications for one or more parts may be forwarded to each fabricator involved in a part, where examiner interprets the fabrication vendors/fabricators as the companies, and the forwarding of specifications for one or more parts to each fabricator through contractual agreements as inducing the forwarding of the electronic specification to another one of the plurality of companies. Because it is shown above in the rejection that operability test results are appended in col. 28, lines 46-62 of Thackston (US 6,295,513), it is the combination

of Thackston (US 2002/0072820), and Thackston (US 6,295,513) that makes it obvious that appended test results are also forwarded to another one of the plurality of companies since it is already attached to the specification.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 571-272-6734. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on 571-272-6708. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the •Patent Application Information Retrieval (PAIR) system, Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

A. R. B.
July 13, 2010

/Akiba K Robinson-Boyce/

Primary Examiner, Art Unit 3628